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(54) Title: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES

(57) Abstract: The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.

WO 03/025148 A2

XX 23-JUL-2001; 2001WO-US023124.
 PF 24-JUL-2000; 2000US-0220116P.
 PR 27-JUL-2000; 2000US-0221143P.
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA Zeng Z, Ruben SM, Rosen CA;
 PI WPI; 2002-171948/22.
 DR N-PSDB; AAD33366.
 XX Two novel proteins, TR21 and TR22, which are members of the tumor
 PT necrosis factor receptor, useful for the diagnosis and treatment of
 PT immune disorders, cancer, cardiovascular disorders.
 XX
 PS Claim 11; Fig 1; 248bp; English.
 XX The present invention relates to novel human tumour necrosis factor (TNF)
 CC receptors, TR21 and TR22 and polynucleotides encoding them. Sequences of
 CC the invention are useful in the diagnosis, treatment and prevention of
 CC cancers (e.g., cancers of the adrenal gland, bone, urogenital or bone
 CC marrow, in particular breast and ovarian cancer), immune disorders (e.g.,
 CC autoimmune hemolytic anaemia, rheumatoid arthritis, allergies, Addison's
 CC disease, ulcerative colitis), cardiovascular disorders (e.g., myocardial
 CC ischaemia), wound healing, neurological diseases (e.g., cerebral anoxia,
 CC epilepsy) and infectious diseases such as viral, bacterial, fungal and
 CC parasitic infections. They are also useful in gene therapy. The present
 CC sequence is human TR21 protein
 XX
 SO Sequence 271 AA;

Query Match 100.0%; Score 1426; DB 5; Length 271;
 Best Local Similarity 100.0%; Pred. No. 1.1e-120;
 Matches 271; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAPRALPGSAVLAAAVFGAVSSPLVAPDNGSSRTLSHRTETTPSPNDTGNGHPYIA 60
 DB 1 MAPRALPGSAVLAAAVFGAVSSPLVAPDNGSSRTLSHRTETTPSPNDTGNGHPYIA 60
 QY 61 YALVPVFFIMGLFGVLI CHLKKKGYRCTTEAODIEBEKEKIELNDSVNENSDTVGOI 120
 DB 61 YALVPVFFIMGLFGVLI CHLKKKGYRCTTEAODIEBEKEKIELNDSVNENSDTVGOI 120
 QY 121 VHYIMKNEANADVAKAMVADNSLYDPESPVTPTSGSPVSPGLSPGRTGKAVCGHIL 180
 DB 121 VHYIMKNEANADVAKAMVADNSLYDPESPVTPTSGSPVSPGLSPGRTGKAVCGHIL 180
 QY 181 HTVGGVVERDVCHRCRHKRWHFIKPTNKSRSRPRRQGEVTVLSVGRFRVTKVHKSNOK 240
 DB 181 HTVGGVVERDVCHRCRHKRWHFIKPTNKSRSRPRRQGEVTVLSVGRFRVTKVHKSNOK 240
 QY 241 ERSLSMSVSGAEVTNGEVPATPVKRRSGTE 271
 DB 241 ERSLSMSVSGAEVTNGEVPATPVKRRSGTE 271

RESULT 2
 ADI21099
 ID ADI21099 standard; protein; 271 AA.
 AC ADI21099;
 XX
 DT 15-APR-2004 (first entry)
 XX
 DE Novel human protein #74.

forensic; nutritional source; damaged tissue; diseased tissue;
 myeloid cell disorder; lymphoid cell disorder;
 bone cartilage tissue growth; tendon tissue growth;
 tissue repair; tissue replacement; burn; incision; ulcer; cancer; human.

XX OS Homo sapiens.
 XX WO2003025148-A2.
 XX 27-MAR-2003.
 XX 19-SEP-2002; 2002WO-US029964.
 XX 19-SEP-2001; 2001US-0323739P.
 PR 13-SEP-2002; 2002US-00323739.
 XX
 PA (HYSE-) HYSEQ INC.
 XX Tang YT, Asundi V, Goodrich RW, Ren F, Zhang J, Zhao QH, Wang J;
 PI Ghosh M, Xue AJ, Weinman T, Weng G, Zhou P, Dimaenac RT, Wang D;
 PI Haley-Vicente D;
 XX WPI; 2003-354603/33.
 DR N-PSDB; ADI21815.
 XX
 PT New polynucleotides and secreted proteins, useful for treating myeloid or
 PT lymphoid cell disorders, in bone cartilage, tendon, ligament and nerve
 PT tissue growth or regeneration, in wound healing, and in tissue repair and
 PT replacement.
 XX
 PS Claim 20; SEQ ID NO 350; 156bp; English.

The invention relates to an isolated polynucleotide encoding a
 CC polypeptide with biological activity. The polynucleotides and
 CC polypeptides are useful in diagnostics, forensic, gene mapping,
 CC identification of mutations responsible for genetic disorders and other
 CC traits, to assess biodiversity, as nutritional sources or supplements.
 CC The polynucleotides may also be used as molecular weight markers,
 CC chromosome markers or may related gene positions, or as an antigen to
 CC raise anti-DNA antibodies or elicit immune response. The polypeptides are
 CC useful for raising antibodies, as markers for tissues in which the
 CC corresponding polypeptide is expressed, for re-engineering damaged or
 CC diseased tissues, for treating myeloid or lymphoid cell disorders, in
 CC bone cartilage, tendon, ligament and/or nerve tissue growth or
 CC regeneration, in wound healing, in tissue repair and replacement, in
 CC healing of burns, incisions and ulcers, and in treating cancer. The
 CC present sequence represents the amino acid sequence of a novel human
 CC protein.
 XX
 SO Sequence 271 AA;

Query Match 100.0%; Score 1426; DB 7; Length 271;
 Best Local Similarity 100.0%; Pred. No. 1.1e-120;
 Matches 271; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAPRALPGSAVLAAAVFGAVSSPLVAPDNGSSRTLSHRTETTPSPNDTGNGHPYIA 60
 DB 1 MAPRALPGSAVLAAAVFGAVSSPLVAPDNGSSRTLSHRTETTPSPNDTGNGHPYIA 60
 QY 61 YALVPVFFIMGLFGVLI CHLKKKGYRCTTEAODIEBEKEKIELNDSVNENSDTVGOI 120
 DB 61 YALVPVFFIMGLFGVLI CHLKKKGYRCTTEAODIEBEKEKIELNDSVNENSDTVGOI 120
 QY 121 VHYIMKNEANADVAKAMVADNSLYDPESPVTPTSGSPVSPGLSPGRTGKAVCGHIL 180
 DB 121 VHYIMKNEANADVAKAMVADNSLYDPESPVTPTSGSPVSPGLSPGRTGKAVCGHIL 180
 QY 181 HTVGGVVERDVCHRCRHKRWHFIKPTNKSRSRPRRQGEVTVLSVGRFRVTKVHKSNOK 240
 DB 181 HTVGGVVERDVCHRCRHKRWHFIKPTNKSRSRPRRQGEVTVLSVGRFRVTKVHKSNOK 240
 QY 241 ERSLSMSVSGAEVTNGEVPATPVKRRSGTE 271
 DB 241 ERSLSMSVSGAEVTNGEVPATPVKRRSGTE 271

RESULT 3